

## **R E M A R K S**

The office action of January 19, 2007, has been reviewed and its contents carefully noted. Reconsideration of this case, as amended, is requested. Claims 1-4, 11-38, 41-42, and 47 remain in this case.

### **Preliminary Comments**

The claims were amended as follows, to correct typographical errors and other informalities. No new matter was introduced. Specifically:

- a. Claim 1 is amended to claim “An encoded computer readable medium comprising a repository of material property data” rather than to “A repository of material property data” This amendment emphasizes the physical embodiment and operation of the invention and is provided to overcome the Examiner’s 35 U.S.C. §101 rejection. Additional amendments to Claim 1 add the word “and” inadvertently omitted from the list under heading 1(a) at line 14 and, to correct errors in antecedent basis, the word “the” was replaced with “a” at line 17.

No new matter is introduced by these amendments.

- b. Claim 14 is amended to add the word “which” that was previously omitted through typographical error.

No new matter is introduced by this amendment.

- c. Claims 14 and 15 are amended to remove the phrase “at least” to make clear that the customer database referred to comprises each the elements listed thereafter, and not merely one or more of those elements.

No new matter is introduced by this amendment.

- d. Claim 16 is amended to remove the phrase “such as shape and form”. Additionally, the phrase “if the dataset passes the checks” has been changed to “when the dataset passes the

checks” and the word “the” has been deleted at several places to correct errors in antecedent basis for some limitations.

No new matter is introduced by this amendment.

- e. Claims 17, 23, 24, 25, and 28 have been amended to replace several instances of the word “the” with the word “a” to correct errors in antecedent basis for limitations recited in those claims.

No new matter is introduced by this amendment.

- f. The Examiner’s attention is drawn to the fact that submitted herewith is Applicant’s Declaration under 37 C.F.R. § 1.131 and Exhibits A and B, providing evidence showing that the date of invention was prior to the filing date of Arritt (US PGPub 2005/0131861).
- g. The numbered paragraphs below correspond to the numbered paragraphs in the Office Action.

### **Objections to the Claims**

7. Claims 1, 14-17, 23-25, and 28 were objected to for informalities.

Specifically, independent claims 1 and 15 were objected to because they each recite the limitations “a result database” and “a test result database” and it was deemed unclear whether these were the same database. For clarification, in each claim, the first instance has been amended to “a test result database” and the second instance amended to “the test result database”.

Examiner noted a typographical error in claim 14, the typographical error has been corrected.

Claim 15 was objected to for lack of certainty in the meaning of the limitation “comprise at least owners, users, and provider”. This has been amended to “comprise ~~at least~~ owners, users, and provider”.

Claim 16 was objected to for lacking proper antecedent bases for the limitations “the class” and “the structure of data”. In each case the word “the” has been removed.

Claim 17 was objected to lacking proper antecedent basis for the limitation “the measurements”. This limitation has been amended to “a measurement”.

Claim 23 was objected to for lacking proper antecedent bases for the limitations “the date of measurement” and “the specimen”. These have been amended to “a date of measurement” and “a specimen”.

Claim 24 was objected to for lacking proper antecedent bases for the limitations “the same test or property data” and “the same sample”. These have been amended to “a same test or property data” and “a same sample”.

Claims 25 and 28 were objected to for lacking proper antecedent bases for the limitations “the set of datasets” and “the specified material”. These have been amended to “a set of datasets” and “a specified material”.

Applicant believes these amendments have fully addressed the Examiner’s objections. Reconsideration and withdrawal of the objections are respectfully requested.

### **Rejection(s) under 35 U.S.C. §112**

8. Claims 1 and 16 were rejected under U.S.C. §112(2) as being indefinite.

Claim 1 was rejected for indefiniteness since there was not an “and” or an “or” following the penultimate element of the list (i)-(iv) under heading 1(a). An “and” has been added between items (iii) and (iv) of the list thereby making clear that the term defined in 1(a) comprises all of the elements (i)-(iv).

Claim 16 was rejected for indefiniteness introduced by the phrase “such as” at line 5. That portion of the claim has been amended as follows:

“...generic physical attributes ~~such as shape and form~~, component materials of the material and their relationship within the material;

Applicant believes these amendments overcome the Examiner's rejections and that the claims are now in condition for allowance. Reconsideration and withdrawal of the rejection are respectfully requested.

#### **Rejection(s) under 35 U.S.C. §101**

5. Claims 1-4, 12-14 and 16-20 were rejected under 35 U.S.C. 101, the Examiner stating that the claimed invention is directed to non-statutory subject matter.

Independent claims 1 and 16 have been amended to overcome Examiner's rejection. Specifically, claim 1 has been amended to direct the claim to "An encoded computer-readable medium comprising a repository of material property data". MPEP 2106.01 which states:

"Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101."

Thus, claim 1 now positively claims a computer-readable medium bearing the database(s), and Applicant believes this, combined with the functional characteristics described in the "wherein" clauses of claim 1, now complies with the requirements of 35 U.S.C. §101 as described in MPEP 2106.01, and is therefore directed to statutory subject matter.

Claim 16 was rejected under 35 U.S.C. §101 for the fact that no "if not" counterpart was provided for the step "if the dataset passes the checks, entering the dataset into the repository" and therefore a logical loop was implied. To remove this ambiguity the step has been amended to read "when the dataset passes the checks..."

Applicant believes that, with these amendments, independent claims 1 and 16 now recite patentable subject matter and are thus allowable. Claims 2-4, 12-14 and 17-20 being dependent upon and further limiting claims 1 and 16 should now be allowable as well. Reconsideration and withdrawal of the rejection are respectfully requested.

### **Rejection(s) under 35 U.S.C. §103**

13-16. Claims 1-4, 11-38, 41-42, and 47 were rejected under 35 U.S.C. 103(a). Specifically, claims 1-4 and 12-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rappold, III (US PGPub 2004/0117397) in view of Arritt et al. (US PGPub 2005/0131861) and further in view of the dissertation titled "Pulsed DC Reactive Magnetron Sputtering of Aluminum Nitride Thin Films" by Jung Won Cho. Claims 15-19, 21-26, 28-30, 34-38, and 47 were rejected under 35 U.S.C. 103(a) as being unpatentable over the above references in further view of Boyde et al.(US PGP 2003/0069795). Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over the all of the above in further view of Markki et al. (US PGPub 2004/0243580). Lastly, claims 27, and 31-33 were rejected under 35 U.S.C. 103(a) as being unpatentable over the references cited above in the rejection of claim 15 in further view of O'Hare et al. (US 6,484,173).

Applicant hereby submits a Declaration under 37 C.F.R. §1.131 and Exhibits A, B and C providing evidence showing that the date of invention was prior to the priority date of Rappold (December 16, 2002), and also Markki (May 27, 2003), and Boyde et al. (September 23, 2002).

The Declaration shows that conception of the invention occurred at least as early as May 30, 2002, prior to the filing date of U.S. PGPub 2005/0131861. Implementation of an embodiment of the invention began in June 2002, and a first working version was produced on or about September 30, 2002, with a test deployment in October of that year.

Exhibits A, B, and C show that the invention was conceived by May 30, 2002 at the latest. Exhibit A establishes this date and consists of a copy of an original business proposal dated May 30, 2002 describing details of the claimed invention. This was a confidential proposal and was not available publicly. Exhibits B and C support the diligence practiced in reducing to practice the claimed invention. Exhibit B is provided as evidence of diligence during this period and consists of a copy of a digital photograph of a planning board showing details of an implementation of the invention with this photograph is provided a copy of a computer screenshot showing the date of the photographic file's creation as being August 2, 2002. Exhibit C consists of a screenshot of change history files for a deployment of the invention, showing

dates from August through December 2002, with the majority of dates corresponding to the test deployment date of October 22, 2002, thereby establishing that the invention was reduced to practice during this period, but in any event no later than October 22, 2002.

It is respectfully submitted that the rejection is overcome by Applicant's Declaration under 37 C.F.R. § 1.131, submitted herewith, providing evidence showing that Applicant's date of invention is prior to the filing dates of Rappold, Markki and Boyde. Since the Applicant's date of invention is prior to these references, they are not available as prior art over the present invention under 35 U.S.C. § 103(a). With those references removed from consideration, Applicant believes that the present invention is not rendered obvious over the remaining references (Arritt and Cho), for the reasons expressed in the prior Office Action responses and the interview with the Examiner.

Reconsideration and withdrawal of the obviousness rejection of claims 1-4, 11-38, 41-42, and 47 are therefore respectfully requested.

Respectfully Submitted:  
Hubert Lobo and Kurien Jacob

By:           /mfb #29619/            
Michael F. Brown, Reg. No. 29,619  
Attorney for Applicant

BROWN & MICHAELS, P.C.  
400 M&T Bank Building - 118 N. Tioga St.  
Ithaca, NY 14850  
(607) 256-2000 • (607) 256-3628 (fax)  
e-mail: docket@bpmlegal.com  
Dated: April 19, 2007